



Guillain-Barré Syndrome

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Objective

- To perform a preliminary analysis comparing the rate of Guillain-Barré Syndrome (GBS) among active duty personnel to that of the general population

Methods - Inclusion Criteria

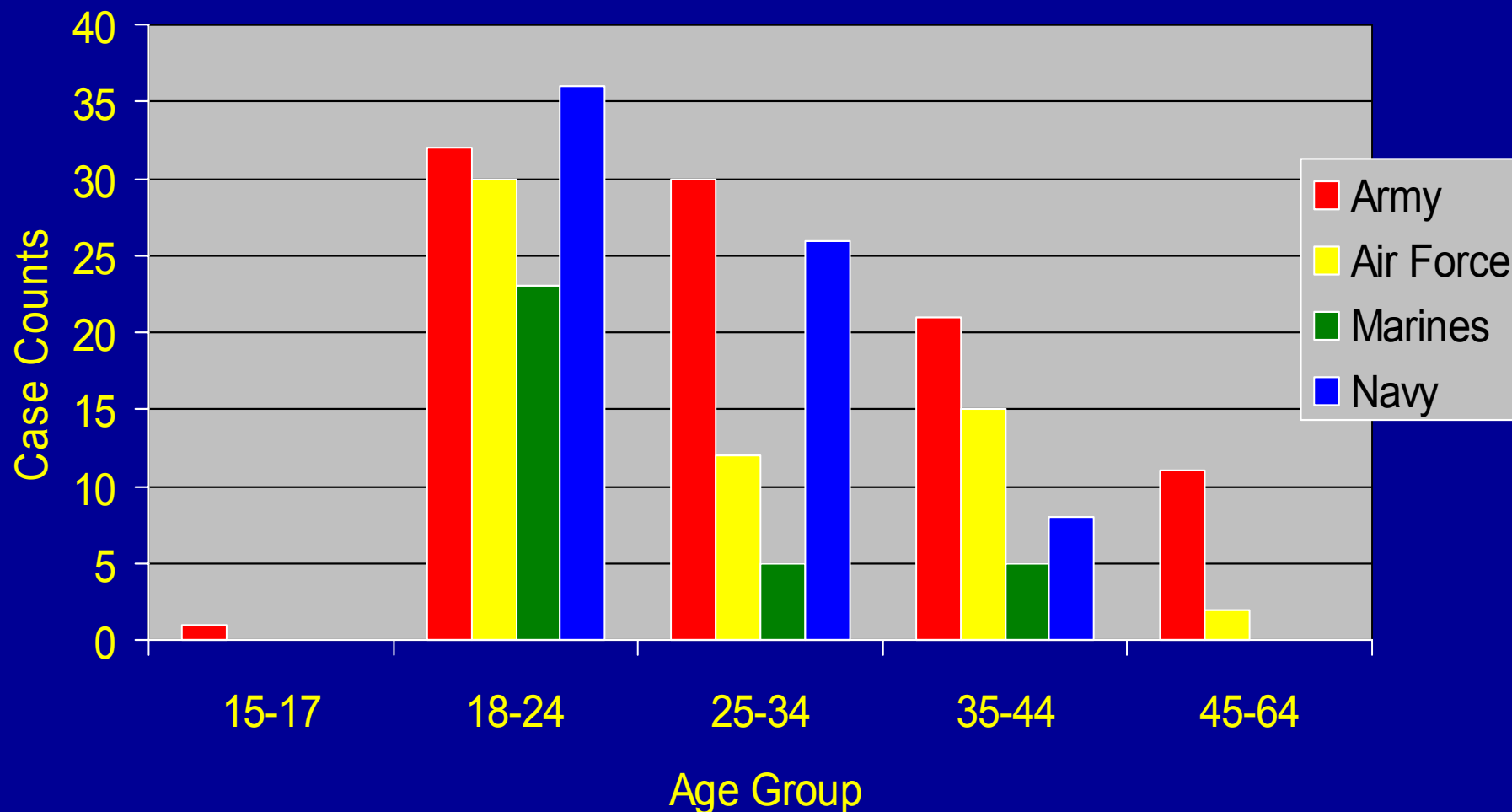
- Data source: M2 electronic inpatient data records
- Data included Army, Air Force, Marines, and Navy Tricare beneficiaries
- Admissions from 01 Jan 1999 to 31 Dec 2004
- ICD-9 code = 357.0 in any of the eight diagnosis fields
 - acute infective polyneuritis, Guillain-Barré syndrome, and post-infectious polyneuritis

Methods

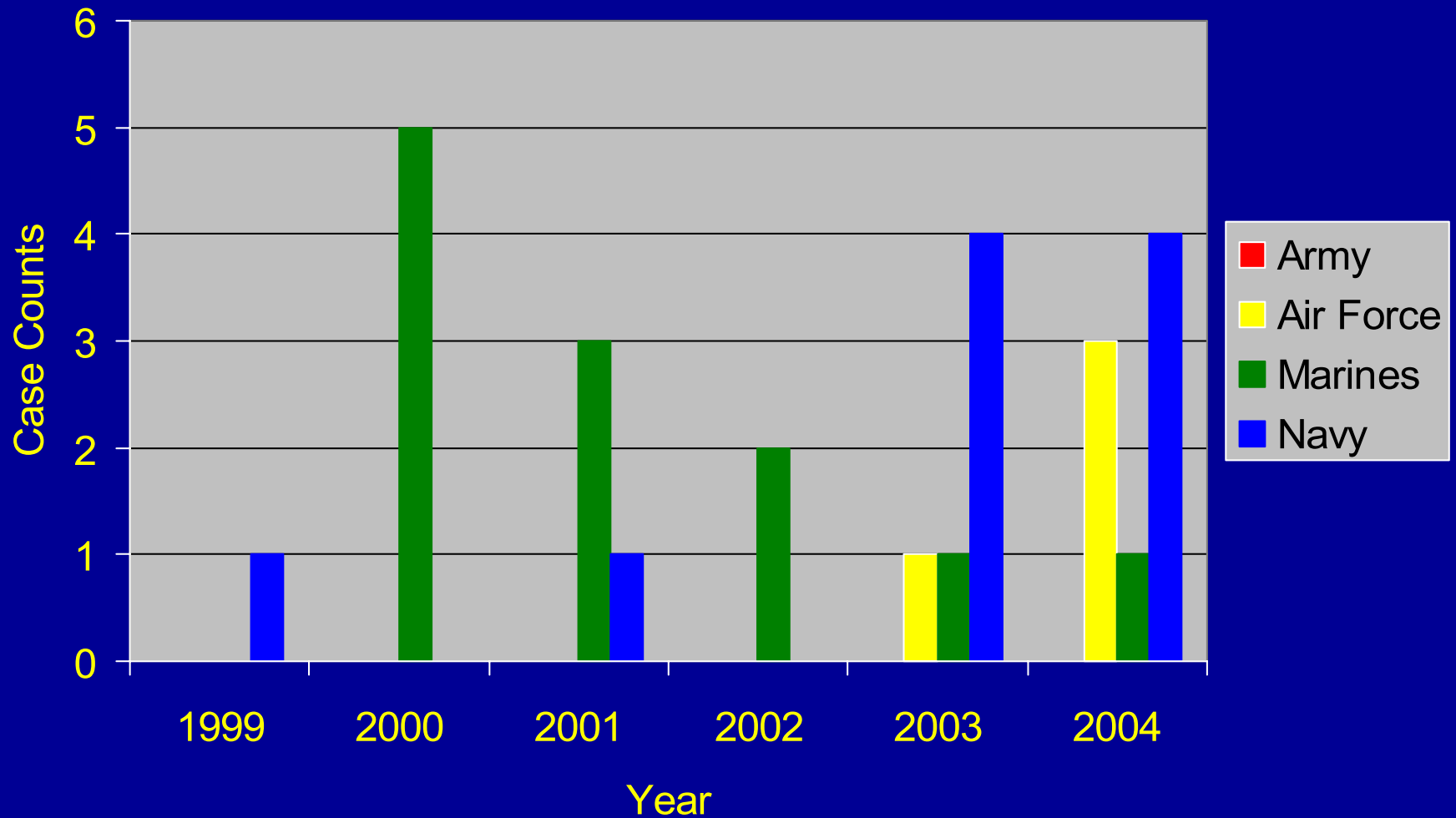
- Active duty in this analysis was defined using the common beneficiary category for active duty and guard
- Each case represents the first occurrence of GBS for an individual between 1999 and 2004
- Active duty denominator numbers were obtained from the DIOR website

Results

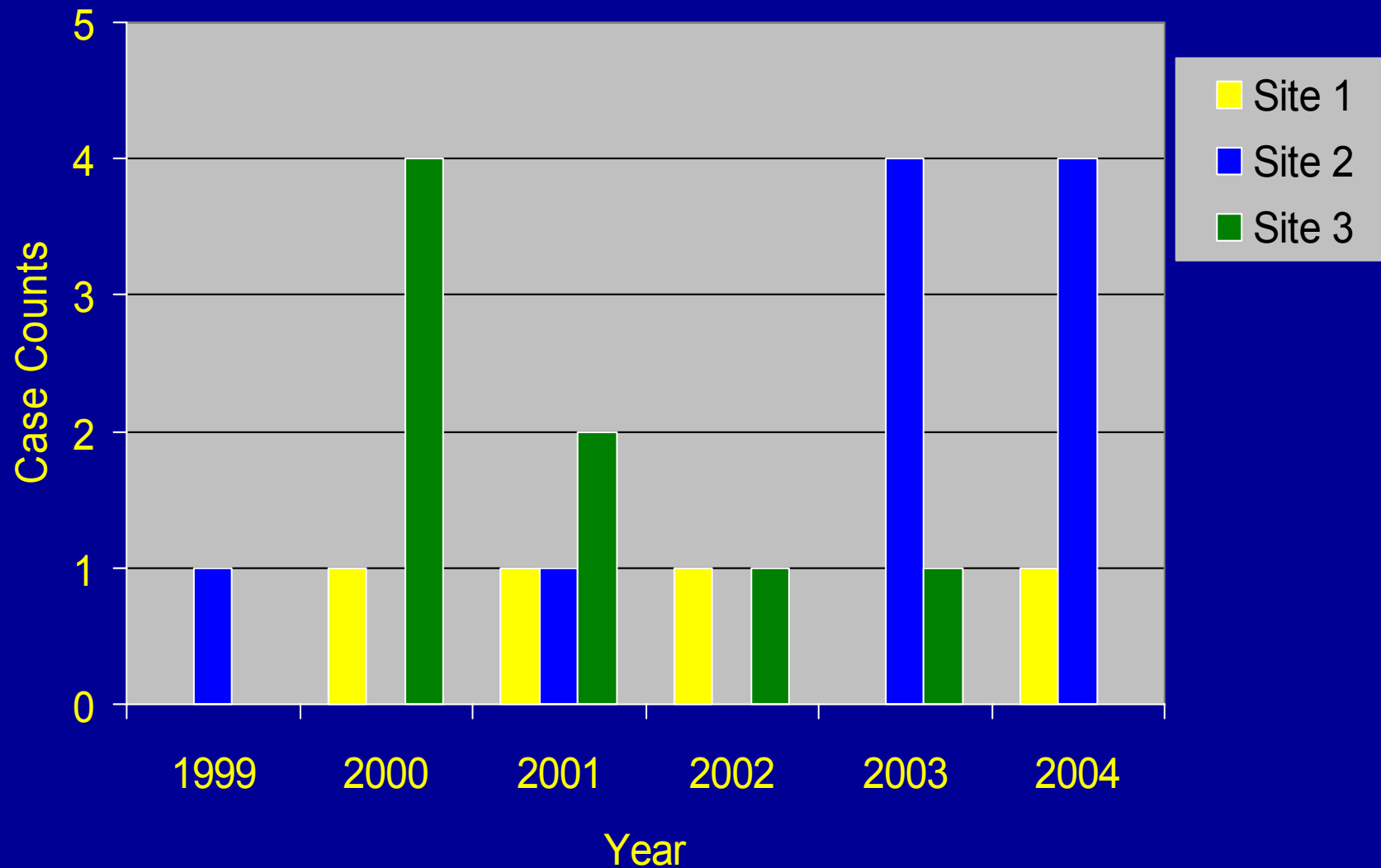
Active Duty with GBS by Age Group and Service, 1999-2004



Recruits with GBS by Year and Service



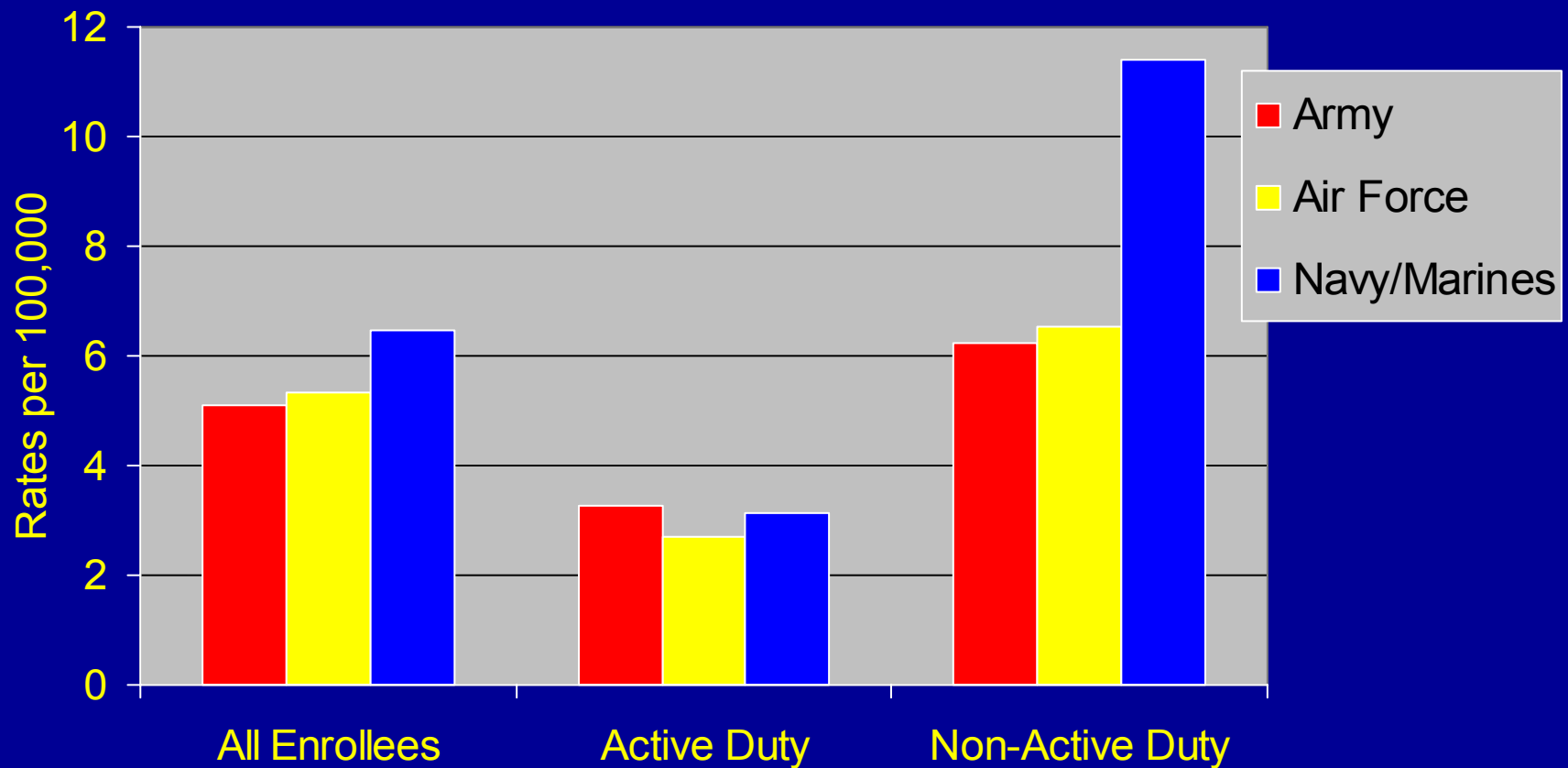
Navy/MC Recruit Camps With GBS by Year and Location



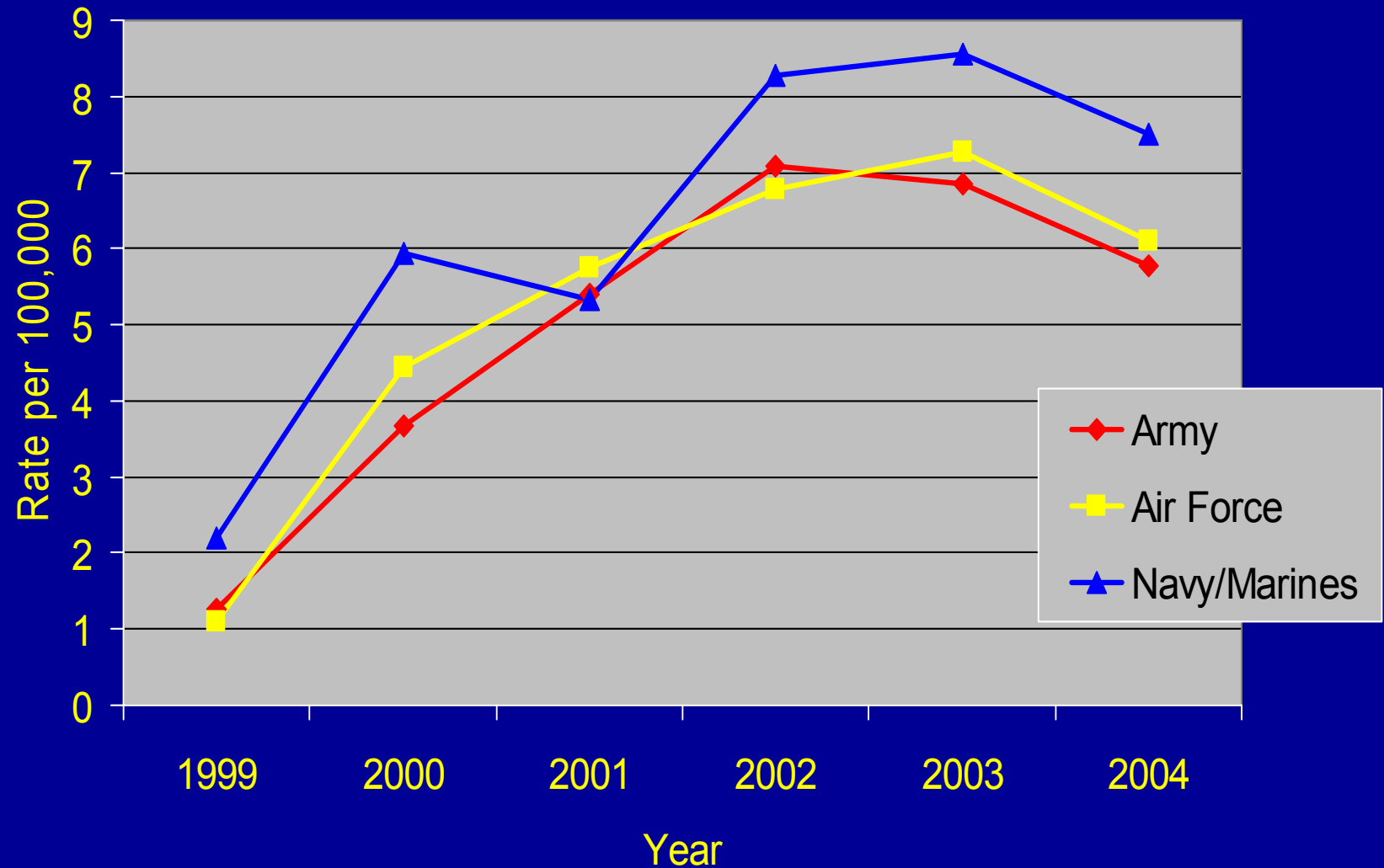
Background Rate

- According to literature review, rate in general population
 - \sim 1-2 cases per 100,000 people per year
 - (range 0.4-4.0)

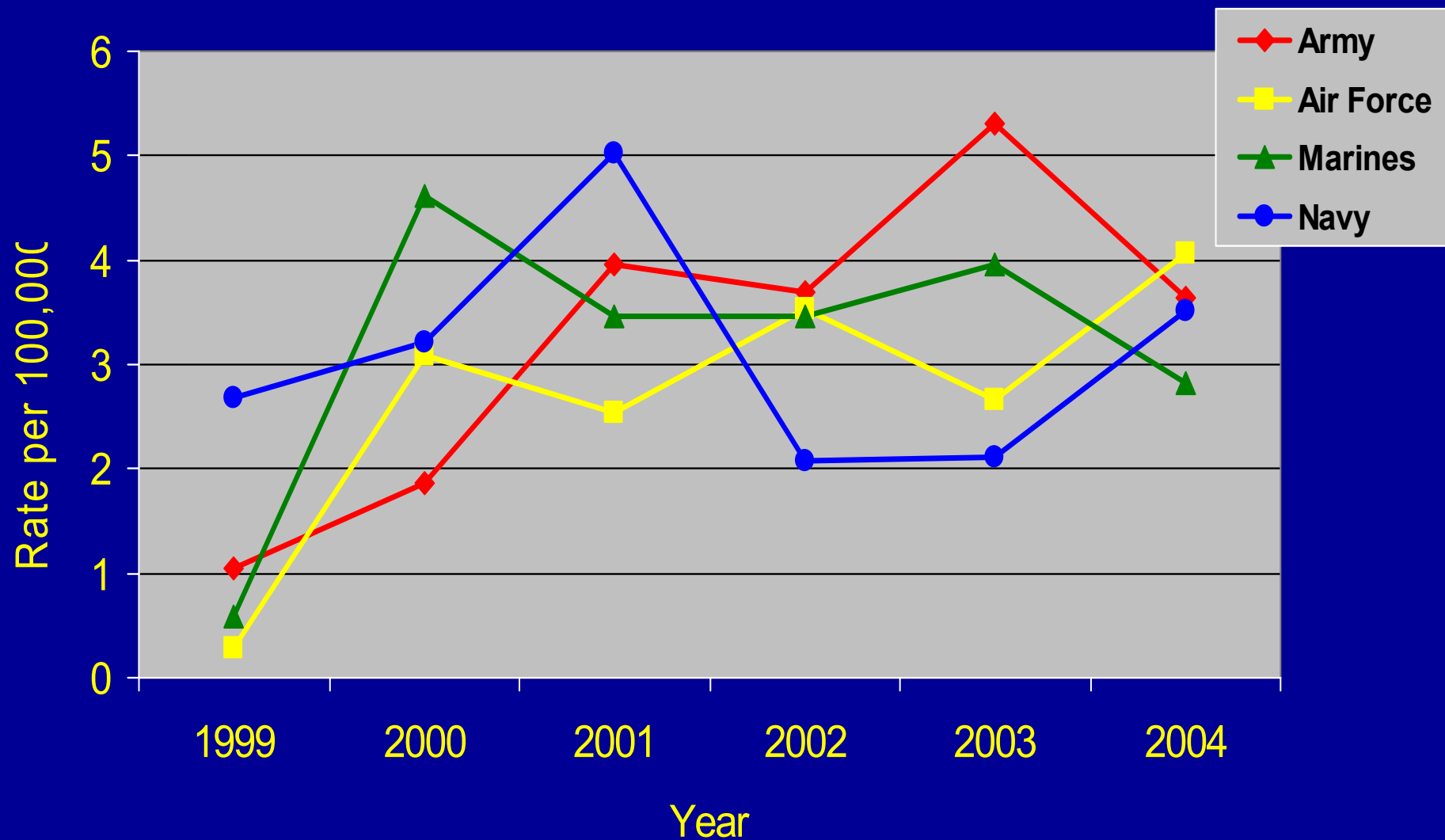
GBS Rates By Enrollee Status and Service, 1999-2004



GBS Rates by Year and Service, All Enrollees



GBS Rates by Year and Service, Active Duty



Conclusions

- Slight increase in the number of GBS cases at one recruit training site
- Active duty Navy/MC overall GBS rate for 1999-2004 falls within the range of other services and the general population
 - Range 2.70 (Air Force) to 3.26 (Army) per 100,000
- Navy/MC GBS rates have remained relatively consistent from 2000-2004
- GBS rate among non-active duty enrollees warrants further analysis

Points to Consider

- All cases with a 357.0 ICD-9 code in any diagnosis position were considered cases
 - May want to limit to just primary or secondary diagnoses
- No statistical analyses were done to determine if there was any significant difference in rates from year to year
- Numerators were based on calendar year and denominators were based on fiscal year
- This is a crude analysis, further investigation is underway

Contact Info

- If you have any questions, please contact NEHC Preventive Medicine Department at epi@nehc.mar.med.navy.mil